PARTIAL LIST OF PROPOSED PAPERS BASED ON INTEX-A

SECTION A- Early publication requests

1. Pfister, G., P. G. Hess, **L. K. Emmons**, J.-F. Lamarque, C. Wiedinmyer, D. P. Edwards, G. Pétron, J. C. Gille, G. W. Sachse, Constraints on emissions for the Alaskan wildfires 2004 using data assimilation and inverse modeling of MOPITT CO, **GRL**

2. **Redemann, J**., P. Pilewskie, P. Russell, S. Howard, J. Pommier, J. Livingston, B. Schmid, W. Gore, J. Eilers, M. Wendisch, Airborne measurements of spectral direct aerosol radiative forcing: A new aerosol gradient method applied to data collected in INTEX/ITCT, 2004, **GRL**

3. **John Merrill:** Ozonesonde/meteorology analysis in collaborative with IONS data

4. **Greg Huey**: Vertical distribution of Pernitric Acid at Northern Mid-Latitudes

5. **Wennberg/Crounse:** Peroxyacetic acid during INTEX-A

SECTION B- Regular special issue publications

Bruce Anderson & others:
- Aerosol-cloud interactions and the role of clouds in modifying atmospheric composition over North America in the summertime
- Summertime sources, spatial distributions, and radiative impacts of aerosols over North America
- A test of satellite data inversion algorithms using INTEX-NA *in situ* and remote aerosol observations

Melody Avery & others:
- Upper tropospheric mixing and fine-scale filamentation during INTEX-A.

Don Blake et al:
- Terrestrial influences on atmospheric carbonyl sulfide over the U.S. during summertime
- Evidence for the widespread transport of Light Alkane Pollution from the Southwestern U.S. during INTEX-NA
- Gaseous tracers of convective uplift during INTEX NA
- Coastal emissions of bromoform and dibromomethane during INTEX NA
- Evidence for long-range transport of Asian emissions to the U.S. during summer
- Non-marine sources of methyl iodide

Karen Bartlett:
- CH4 transport from Asia: source characterization and variability

Ed Browell/Lidar group:
- Large-scale air mass characteristics observed across North America during the summertime
- Flux of ozone from North America to the North Atlantic during the summertime
- Biomass burning plumes from Alaskan fires observed by an airborne lidar over the United States

Brune/Crawford/Cohen/others
- Oxidation chemistry and oxidant levels in INTEX vs previous campaigns
- Use of higher resolution observations to assess impact on oxidation

- Vertical distribution of ozone production in the BL

Greg Carmichael et al:
- Regional photochemistry and the impact of reanalysis
- Constrained eulerian and 0-D modelling differences
- Predictability of ozone and SOA (improvements from INTEX?)
- Impact of lateral boundary conditions on regional ozone
- Regional emissions inventories as compared to observed data
- Formal inversion for CO, NO_x and speciated HCs

Bob Chatfield/Binkowski
-Pollution aging during INTEX, comparison with CMAQ
-Aerosol characterization in lower troposphere using ICARTT data & EPA forecast model.

Yonghoon Choi
- CO2/CO ratio as a tracer of Asian pollution

Tony Clarke et al:
- Pollution and biomass burning aerosol over North America: Black carbon, f(RH), microphysics and optics
- *In situ* aerosol optical closure experiments under MISR
- An evaluation of multimodal aerosol retrievals for MODIS and MISR as a tool to obtain a CCN proxy
- An assessment of measured and modeled aerosol size resolved concentrations and optical parameters during INTEX

Ron Cohen et al:
- Effects of lightning and convection on composition of the mid and upper troposphere: diagnostics of age of air
- Constraining the branching ratio for nitrate formation during isoprene oxidation: How much ozone is produced by isoprene oxidation in the boundary layer?
- Comparison of airborne and ground-based NO2 measurements with satellite (OMI and SCIA) column NO2
- Comparisons of NO2 and Sum_PN measurements within the DC-8 and other platforms
- Reactive nitrogen balance and budget

Peter Collarco:
- Back and forward trajectory and RDF methods for plume origin and age

Jim Crawford:
- NMHC impacts on photochemistry

Louisa Emmons:
- Validation of MOPITT CO with ICARTT data

Alan Fried/others:
- Formaldehyde in UT: convective contributions

Henry Fuelberg et al:
- Meteorological overview of the INTEX-A period
- A comprehensive investigation of warm season CO lofting and transport episodes utilizing *in situ* measurements, a regional scale chemical transport model, and satellite-derived data
- An examination of summertime cyclones in the context of the classical warm conveyor belt definition established during the cool season

- Examination of observed LNOx and post-convective vertical LNOx profiles

B. Heikes/Brune/Fried/O'Sullivan/Wennberg/others
- Effects of precipitation and physical removal on photochemically generated species
- Influence of convection on the vertical distribution of peroxides and formaldehyde and HOx production

Rynda Hudman/D. Jacob/others:
- A multi-platform analysis of the North American reactive nitrogen budget during the ICARTT summer intensive
- Impact of North American pollution on global ozone and transatlantic transport
- Reactive nitrogen budgets and export efficiency

Greg Huey et al:
- CIMS measurements of SO2 and HO2NO2 during INTEX-A. This paper will describe instrument, leftover aspects of HO2NO2, tracing down SO2 sources and SO2 comparison with P3.

Intercomparison papers: Brune/Chen/Arnold/ Ryerson/ others

- DC-8/P-3B intercomparison for all species – comparison – operations –what's hard to measure – uncertainties (**Chen/Brune/Ryerson/others**)
- Bae 146/DC-8 intercomparison for all species - comparison – operations –what's hard to measure – uncertainties (**Arnold/Chen**)
- DC-8/J31/MISR aerosol comparison (**McNaughton/others**)
- DC-8/King Air/ surface-based remote sensing: CO2 and CH4 (Vay/Wennberg/Wofsy/others)
- HCHO unified data set synthesis (**Fried/Heikes**)
- DC-8/P-3/SCHIAMACHY HCHO comparison (**Millet/Heikes/Fried/others**)
- DC-8/P-3/SCHIAMACHY NO2 (**Martin/Cohen/Ryerson/Burrows/others**)

Lyatt Jaeglé:
- Summertime influence of Asian pollution in the middle and upper troposphere over the United States

Ralph Kahn:
- INTEX-NA campaign validation of space-based multi-angle imaging derived aerosol particle types

Chieko Kittaka:
- RAQMS aerosol model: MODIS AOD assimilation. Impact of Smoke plume on air quality. Relative contribution of organic carbon to air pollution PM2.5

Barry Lefer/Rick Shetter:
- Impact of clouds and aerosols on ozone photochemistry during INTEX-A
- Radiative transfer modeling of actinic flux measurements using in situ and satellite derived aerosol optical properties

Qinbin Li/D. Jacob/others:
- Ozone maximum over the southern United States: Anthropogenic, biogenic, and lightning influences

John Livingston, Schmid, et al.:
- Water vapor retrievals by airborne sunphotometer in INTEX/ITCT 2004: Comparisons to aircraft in situ, sonde, and microwave radiometer (and regional climatology?).

Martin/others:

- Top-down emission estimates of NO_x using SCIAMACHY and aircraft measurements

W McMillan/Warner/Diskin/Podolske/Thornhill/J Barrick/Emmons
- Carbon monoxide: AIRS and MOPITT vs DACOM
– Water vapor: AIRS vs DLH & Cryo

John Merrill et al:
- Ozonesonde/ozone analysis based on aircraft in-situ O3 and DIAL

Dylan Millet/Jacob et al:
- Variability of HCHO during ICARTT: Implications for GOME/OMI interpretation
- Acetone and methanol in the atmosphere: Constraints from ICARTT
- Top-down emission estimates of formaldehyde using SCIAMACHY and aircraft measurements

Sam Oltmans:
- Site characteristics and comparison with prior years

Ali Omar:
- Lidar depolarization & wavelength dependence to identify aerosol type & characterize air masses: Applying CALIPSO algorithms to UV-DIAL data.

G. Pfister/Chatfield
- Photochemical evolution of biomass burning plumes

Lenny Pfister:
- Convective exposure and time since last recent convection for the upper trop
- Role of convection in processing of Asian air masses

Ken Pickering:
- Model analyses – contribution of lightning to North American outflow of NOx, NOy, and ozone
- Case study of lightning near Huntsville using a cloud resolving model

Brad Pierce/Hitchman/Al-Saadi- RAQMS group
- Quantifying stratospheric O3 contribution to the China express using the -----
- Large scale characterization, O3 and NOy budget: Export, stratospheric, and convective influences using RAQMS
- Coexisting of regional transport of Alaskan biomass burning plume, enrainment into continental boundary layer, air quality impact
- Source-receptor transport characterization using trajectory models and satellite data

Peter Pilewskie:
- Aerosol layers above clouds: Radiative forcing and influence on satellite retrievals of cloud properties

Anne Thompson:
- IONS overview and “The summer that wasn't” in the Northeast

Solène Turquety/D. Jacob et al:
- Using satellite observations to constrain the daily North American biomass burning emissions during the summer 2004
- Inverse modeling of North American anthropogenic emissions of CO using aircraft and satellite measurements

Stephanie Vay et al:
- Evidence of North American CO2 sources and sinks from regional observations during INTEX-A
- Draw-down of CO2/OCS/HCN over North America

Rodney Weber:
- Regional impact of the Ohio River Valley on boundary-layer SO4 concentrations: Results from INTEX-NA and NEAQS

Youhua Tang:
- 3-D model, West-East coast variability. Nitrogen partitioning between gas & aerosol. Use A/C data to verify emissions, esp NOx & SO2.

Lee Thornhill:
- Bulk transport of aerosol off the NE US coast

Wennberg/Crounse:
- High resolution H2O2 obs in clouds

Wingenter/Crawford:
- Iodine sources and photochemistry in the marine BL